

Laboratory Cement Test Report-15.8 Squeeze Slurry FB 1 @ 80 BHCT

Fluid No :	Client : Chevron	Location / Rig : Workover	Signatures
Date : Mar-02-2011	Well Name : Hagood A9	Field : Rangely	Cameron Thompson

Job Type	Squeeze	Depth	500.0 ft	TVD	500.0 ft
BHST	80 degF	BHCT	80 degF	BHP	397 psi
Starting Temp.	80 degF	Time to Temp.	00:07 hr:mn	Heating Rate	0.00 degF/min
Starting Pressure	257 psi	Time to Pressure	00:07 hr:mn	Schedule	9.26-1

Composition

Slurry Density	15.80 lb/gal	Yield	1.16 ft ³ /sk	Mix Fluid	5.106 gal/sk
Solid Vol. Fraction	41.1 %	Porosity	58.9 %	Slurry type	Conventional

Code	Concentration	Sack Reference	Component	Blend Density	Lot Number
D907		94 lb of BLEND	Blend	199.77 lb/ft ³	
Fresh water	5.106 gal/sk		Base Fluid		

D046	0.200 %BWOC		Antifoam		
D167	0.200 %BWOC		Fluid loss		
D065	0.200 %BWOC		Dispersant		

Rheology (Average readings)

(rpm)	(deg)
300	64.0
200	48.0
100	31.5
60	23.5
30	18.5
6	15.0
3	12.5

Temperature	80 degF
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Pv: 50.639 cP
Ty: 13.85 lbf/100ft ²

Thickening Time

Consistency	Time
POD :	03:01 hr:mn
30 Bc	03:10 hr:mn
50 Bc	03:17 hr:mn
70 Bc	03:34 hr:mn
Remark : Thickening time do not include batch time	

Comments

General Comment :
Fann Reading Comment :
Thickening Time Comment :
Other test Comment : ; ; ;

Client :
Formation :
Country :

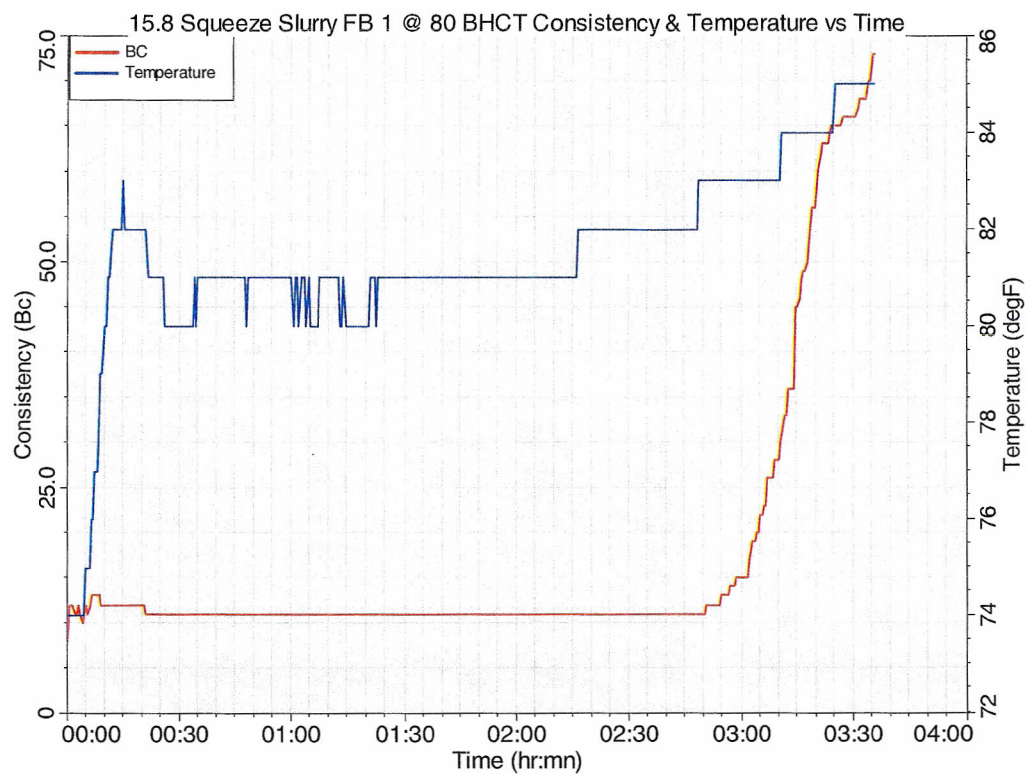
Well :
District :

Schlumberger

LabDB *

Client : Chevron
Well : Hagood A9
String : Squeeze
Rig : Workover
Country : USA

11C127.cfw 03-03-2011 LoadCase Untitled Version wcs-cem461_08



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CemCADE^{*} well cementing recommendation for

Operator :
Country :
State :

Well :
Field :

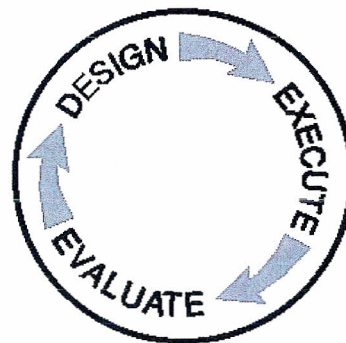
Prepared for :
Proposal No. :
Date Prepared :

Location :
Service Point :
Business Phone :
FAX No. :

Prepared by :
Phone :
E-Mail :

well description

Configuration	Plug	Stage : Single	Rig Type : Land
Prev.String	MD : 6494.0 ft	OD : 7 in	Weight : 29.0 lb/ft
Drill Pipe	MD : 500.0 ft	OD : 2 7/8 in	Weight : 6.5 lb/ft
Mud Line		0.0 ft	
Total MD		6700.0 ft	
BHST		80 degF	
Mean OH Diameter		8.500 in	
Mean Annular Excess		0.0 %	
Mean OH Equivalent Diameter		8.500 in	
Total OH Volume		14.5 bbl (including excess)	



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Client :
String :
Country :

Well :
District :
Loadcase :

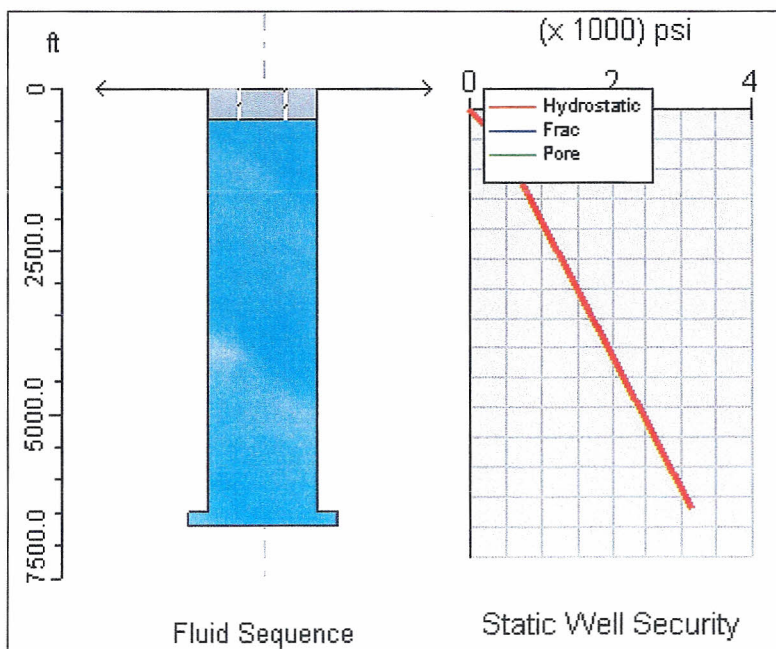
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Section 1: fluid sequence

Original fluid	Brine	8.43 lb/gal	
	Pv : (cP)		Ty : (lb/100ft2)
Displacement Volume	2.9 bbl		
Drill Pipe Volume	2.9 bbl		
Total Volume	43.5 bbl		
TOC	0.0 ft		

Name	Volume (bbl)	Ann. Len (ft)	Top (ft)	Fluid Sequence		Rheology
				Density (lb/gal)		
Fresh Water	20.0	0.0		8.34	k:(lb.f.s^n/ft2)	n:()
Slurry	20.6	500.0		15.80	k:(lb.f.s^n/ft2)	n:() Ty:(lb/100ft2)
Brine	0.0		500.0	8.43	Pv:(cP)	Ty:(lb/100ft2)
Brine	0.0		500.0	8.43	Pv:(cP)	Ty:(lb/100ft2)
Slurry	2.9		0.0	15.80	k:(lb.f.s^n/ft2)	n:() Ty:(lb/100ft2)

Static Security Checks :	
Csg.Pump out	1 ton



Client :
String :
Country :

Well :
District :
Loadcase :



Schedules :

Schedule	Test
	Start Temp
	Start Press.
	Final Temp.
	Final Press (BHP)
	Time to T
	Time to P
	Heating Rate
	Comments

Section 2: fluid description

Fresh Water DESIGN

Fluid No: 2
Rheo. Model : POWER_LAW
At temp. : 80 degF

Density : 8.34 lb/gal
k : (lb³.sⁿ/ft²)
n : ()
Gel Strength : (lb/100ft²)

Job volume : 20.0 bbl

Slurry DESIGN

Fluid No: 3
Rheo. Model : HERSCHEL_B.
At temp. : 80 degF

Density : 15.80 lb/gal
k : (lb³.sⁿ/ft²)
n : ()
T_y : (lb/100ft²)
Gel Strength : (lb/100ft²)

DESIGN

BLEND

Name : G
Dry Density : 199.77 lb/ft³
Sack Weight : 94 lb

SLURRY

Mix Fluid : 5.113 gal/sk
Yield : 1.16 ft³/sk
Solid Fraction : 41.0 %

Job volume : 23.5 bbl
Quantity : 114.11 sk

BASE FLUID

Type : Fresh water

Density : 8.32 lb/gal

Base Fluid : 5.113 gal/sk

Code	Conc.	Additives	Function
D167	0.200 %BWO		Fluid loss
D065	0.200 %BWO		Dispersant

Thickening Time Schedule () (Bc) at (hr:mn)
Compressive Strength Schedule () (psi) at (hr:mn)